

# 2012 Annual Drinking Water Quality Report

(Consumer Confidence Report)



**CITY OF BELTON**

**PWS ID Number: TX0140002**

Phone Number: (254) 933-5800

## Our Drinking Water is Regulated

The City of Belton is pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

### Where do we get our drinking water?

The source of drinking water used by the **CITY OF BELTON** is **Purchased Surface Water**. The City purchases from Bell County Water Control and Improvement District #1 and the Central Texas Water Supply Corporation.

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW>. For more information on source water assessments and protection efforts at our system, please contact us.

### En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. **(254) 933-5800** - para hablar con una persona bilingüe en español.

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of material used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available for the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

For more information regarding this report contact:

**Mike Huber, P.E.**

**Public Works Director, City Engineer**

**Phone: (254) 933-5823**

## Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.



## Public Participation Opportunities

**Date:** 2nd & 4th Tuesdays of each month

**Time:** 5:30 PM

**Location:** Harris Center, 401 Alexander, Belton

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please contact us at (254) 933-5800.

## What substances are tested for in our drinking water?

The City of Belton's drinking water is routinely monitored for contaminants according to Federal and State laws. **Your drinking water is tested for over 97 different contaminants.** The State of Texas requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. If no data is presented for a contaminant, it means it was not detected.

### Abbreviations and Terms:

- NTU - Nephelometric Turbidity Units
- ppm - parts per million, or milligrams per liter (mg/L)
- MFL - million fibers per liter (a measure of asbestos)
- ppb - parts per billion, or micrograms per liter
- pCi/L - picocuries per liter (a measure of radioactivity)
- ppt - parts per trillion, or nanograms per liter

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal or MRDLG:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial containments.

**Maximum Residual Disinfectant Level or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Avg:** Regulatory compliance with some MCL's are based on running annual average of monthly samples.

**ppm:** milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

**ppb:** micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

**na:** Not applicable

## 2012 Regulated Contaminants: Test Results

### Inorganic Contaminants

Year or Range	Violation	Violation Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	N	Barium	0.06	0.06	0.06	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2012	N	Fluoride	0.21	0.21	.22	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2012	N	*Nitrate	0.12	0.12	0.12	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural Deposits.

**\*Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for periods of time because of rainfall or agriculture activity. If you are caring for an infant you should ask for advice from your health care provider.**

### Radioactive Contaminants

Collection Date	Contaminant	Max. Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
06/18/2009	Bet/photon emitters	5.5	4.0 - 5.5	0	50	pCi/L*	N	Decay of natural and man-made deposits

\*The MCL for Gross Beta Particle Activity is 4 millirem/year. Since there is no simple conversion between millirem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.

### Synthetic Organic Contaminants Including Pesticides

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2012	Atrazine	0.165	0.12	0.21	3	3	ppb	N	Runoff from herbicide used on row crops

### Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2012	Chloramines	3.16	2.6	3.7	4.0	<4.0	ppm	Disinfectant used to control microbes

### Disinfection Byproducts \*(Regulated Contaminants)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids*	17.6	17.6	17.6	60	ppb	Byproduct of drinking water disinfection
2012	Total Trihalomethanes*	24.7	24.7	24.7	80	ppb	Byproduct of drinking water disinfection

## Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, tested methods, and steps you can do to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Year	Contaminant	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	2.4	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2009	Copper	0.208	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2012	Turbidity	0.21	100.00	0.3	NTU	Soil runoff

## Total Organic Carbon

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2012	Source Water	3.64	.48	10	ppm	Naturally present in the environment
2012	Drinking Water	.12	.06	.22	ppm	Naturally present in the environment
2012	Removal Ratio	51.14%	46%	69.8%	%removal*	NA

\*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

## Total Coliform Bacteria

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Maximum Total Coliform Contaminant Goal	MCL	Highest Number of Positive Samples	Fecal Coliform or E. Coli Max. Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Source of Contamination
0	0 positive Monthly Sample	There were no TCR detections for this System in this CCR period	*	0	No	Naturally present in the environment

\*Two or more coliform found samples in any single month

## Reportable Constituents (Not Regulated)

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2012	Sodium	11.8	11.7	11.9	NA	ppm	Erosion of natural deposits; by-products of oil field activity

## Cryptosporidium Monitoring Information

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water. BCWCID #1 completed its compliance schedule meeting the requirements of the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Monitoring for cryptosporidium and E. Coli began in October 2006 and ended in September 2008. After 48 samples, no microbial pathogens were found.